

Development of post-traumatic stress disorder in people with visual impairment

Preliminary findings from a literature review





Key message

- Visual impairment may be associated with increased risk of traumatic events and PTSD
- The lack of visual sensory information appears to alter the way traumatic events are experienced and processed





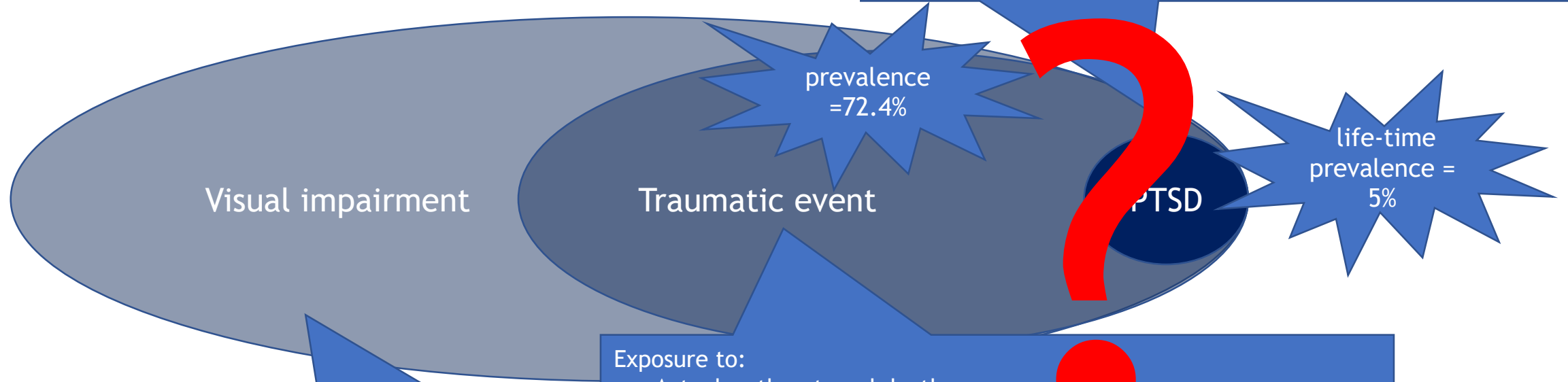
Why this study?

- Having a visual impairment affects mental health
- Known associations between visual impairment and depression and anxiety
- Limited attention for PTSD
- Need among care professionals for more insight and practical tools



Focus of the study

- A: Occurrence of traumatic event
- B: Intrusion symptoms
- C: Avoidance
- D: Negative alterations in cognition and mood
- E: Alterations in arousal and reactivity
- F: Persistence of symptoms for more than 1 month



visual acuity < 0.3 in the better eye and/or visual field <20 degrees of fixation

- Exposure to:
- Actual or threatened death
 - Actual or threatened serious injury
 - Actual or threatened sexual violation
- Through:
- direct experience
 - witnessing the traumatic event in person
 - learns that it occurred to a close family member or friend
 - repeated or extreme direct exposure to aversive details of the event



Study approach

- Narrative literature review: semi-structured, broad scope, open approach
- Search in databases (PsycInfo, Medline, Web of Science), hand searching references and Google Scholar
- Including articles studying or discussion visual impairment, traumatic events and PTSD



Included articles

14 articles:

- 8 articles addressing visual impairment and trauma and PTSD

+

- 6 articles addressing visual impairment and traumatic events

→ Quantitative (5), qualitative (4), mixed methods (1), case-report (2), systematic reviews (2)



Things to take into account...

- **Visual impairment:** assessment and type/ severity of impairment often not described
- **Traumatic events:** some events described do not seem to fit formal DSM-V criteria
- **PTSD:** various instruments used for diagnosis, diagnostic procedure not always clearly described

→ *Articles focusing on veterans and war/ conflict were overrepresented*



What did we find?

4 main themes

1. Exposure to traumatic events (#)
2. Experience of a traumatic event (#)
3. Processing traumatic events (#)
4. PTSD (#)



1. Exposure to traumatic events

- 80% of the study population in a Norwegian study experienced at least one traumatic event
 - Most reported events: 1) illness or injury causing vision loss (36%), life-threatening illness or injury (35%), and transportation accidents (32%) ¹
- Indications of increased risk of certain traumatic events (falls, traffic accidents, abuse) ²
Some traumatic events specifically linked to visual impairment (e.g. vision loss, attack on a guide dog, falls due to unpredictable environment, getting lost) ^{1,7,8,10}
- Possible protective effects of sheltered living ¹¹



2. Experience of a traumatic event

- Challenges in obtaining information during a traumatic event ^{7,12,13}
- Challenges in navigating the environment for ‘a way out’ ^{7,12,13}



3. Processing a traumatic event

- Difficulties with reconstructing the event (cause-effect) ¹⁵
- Processing of auditory information distorted (hypersensitive, inaccurate) ^{13,15}
- Intrusions seem to manifest through senses through which the event was experienced ^{7,16}
- Heightened sense of vulnerability → avoidance ^{7,13,15}
- Importance of social network and independence ^{7,12,13}



4. PTSD

- 5 studies reported prevalence; this was generally between 10% tot 16% ^{2,11,17,18,19}
 - 12% of 736 randomly selected members of a Norwegian patient organisation for people with visual impairment; most reported causes were sexual and physical abuse and illness or injury causing vision loss²
- Possible diagnostic challenges because of different ways of experiencing traumatic events and deviations in symptom manifestation^{14,15}
 - Suggestion to be flexible in diagnosing PTSD in this population¹⁴



Other related issues...

- Overlap in symptoms with Traumatic Brain Injury (TBI)
- PTSD may cause vision problems, especially blurry vision
- Vision problems can be a side-effect of some drugs prescribed for PTSD
- Visual conversion/ function loss may be linked to traumatic events



Keep in mind...

- Traumatic events may lead to a variety of stress-related mental health problems and psychiatric disorders (depression, anxiety substance use)
- PTSD has a high comorbidity; about 80% has a co-morbid psychiatric disorder



Conclusions

- Visual impairment may be associated with increased risk of traumatic events and PTSD
- The lack of visual sensory information appears to alter the way traumatic events are experienced and processed
- Care professionals need to be aware of the (possible) relations between visual impairment and trauma
- Further investigation is needed on this topic, also on possible implications for the diagnostic process and treatment



Literature (1)

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Literature (2)

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Thank you!

